SPECIAL BULLETIN NO. 6 Montana State Board of Health

Help them Grow Up Strong and Healthy



Tuberculosis is particularly dangerous to children. Infected in childhood, their weakened constitutions must be strengthened to combat the disease. Thousands of children are being protected from Tuberculosis in open air schools, and many already attacted are

being cured with the money received from the sale of Red Cross Christmas Seals. The lengthened lives of little children will be your Christmas blessing if you buy.

RED CROSS Christmas Seals

If you cannot buy Red Cross Seals in your town, write to the AMERICAN RED CROSS, Washington, D. C., for as many as you wish at 1c each.

Entered as second-class matter July 10, 1914, at the Post Office at Helena, Montana, under the Act of August 24, 1912.



PROCLAMATION BY THE GOVERNOR.

The week of December third to tenth has been set aside by the National Association for the Study and Prevention of Tuberculosis as Tuberculosis Week, and will be observed in the churches and schools and by religious, social and civic organizations throughout the country.

The recent organization of the Montana Association for the Prevention of Tuberculosis, affiliated with the National Association, has aroused unusual interest in the fight against tuberculosis in this State. The campaign against this disease cannot be successfully carried on unless everyone does his part; and that there is a part for everyone is very evident. Montana has taken action in the anti-tuberculosis campaign through the establishment of its State Sanitarium and more recently by the formation of an organized movement, and it should soon come to the front among the states that are leading in this great humanitarian movement.

President Wilson said in a recent letter to the National Association:

"I note with genuine interest and satisfaction the growth and increasing success of the work of the National Association for the Study and Prevention of Tuberculosis and hope that the devotion and enthusiasm of its active members may be crowned with still greater success during the present year.

"I am interested to learn of the success of the sale of the Red Cross Christmas Seal as a means for raising funds for the work, and I hope that the people of the country will avail themselves of that ready and easy means of showing their interest in a work which is of so universal importance."

The following simple rules, prepared by the National Association show what steps are necessary to control tuberculosis:

- By teaching the consumptive to destroy his sputum.
- By teaching people not to sleep, live or work in dark or badly ventilated rooms.
- By teaching the consumptive how to destroy his sputum so as not to infect his family or neighbors.

- By discovering the disease in its early stages and curing the patient, thus removing a source of infection to others.
- By educating the community as to the nature of the disease—that it is communicable, preventable and curable.
- By educating people to keep their bodies in such physical condition as to enable them to resist the germs.
- By advocating fresh air, outdoor life, sunshine, rest, no overwork, wholesome food, temperate habits.
- By safeguarding the health of children, keeping them away especially from sources of infection.
- By insisting upon periodic (at least yearly) physical examination for everyone, well or sick.

The Montana Association points out how anyone can help in this movement in the following rules:

- Clergymen—By informing themselves on the actual tuberculosis situation in their respective parishes and cities; by making adequate provision for indigent members of their churches; by distributing literature and educating the people regarding tuberculosis; and by co-operating definitely with all existing agencies working for the prevention of tuberculosis.
- Physicians—By teaching prevention of tuberculosis and by insisting that their patients be examined regularly, whether they are sick or not.
- Teachers—By instructing pupils as to nature, prevention and cure of tuberculosis; teaching children simple rules of health, how to breathe deeply, etc., keeping the class room well ventilated.
- Parents—By keeping the home clean and well ventilated; teaching children to sleep with windows open, to eat proper and nourishing food, to observe the laws of health; and above all, keeping small children away from infected persons.
- Children—By keeping clean; by not putting anything in their mouths, except food; by staying as much as possible in the fresh air and sunshine; by eating only wholesome and nourishing food.

Workers—By insisting on the working place being thoroughly ventilated; by avoiding dust, dampness and darkness; by avoiding overwork; by demand for proper spittoons.

Everyone—By taking care of his own health; by stopping indiscriminate spitting; by joining in the movement to stamp out tuberculosis.

Therefore, I, S. V. Stewart, as Governor of the State of Montana, do hereby issue this my proclamation, designating December third to tenth as Tuberculosis Week.

And I do earnestly urge the observance of this occasion by our churches, schools and citizens.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State to be affixed.

DONE at Helena, the Capital, this the twenty-third day of November, in the year of our Lord, one thousand nine hundred sixteen.

S. V. STEWART.

By the Governor:

A. M. ALDERSON, Secretary of State.

A CAMPAIGN FOR THE SALE OF RED CROSS SEALS IN MONTANA.

Last year through the efforts of the Montana Nurses Association and the National Anti-Tuberculosis Association, there was turned into the State Association Seventeen Hundred (\$1700) Dollars. With this fund the State Organization has been able to carry on a campaign of education and is now organizing the work in different parts of the State. While this money could, no doubt, be legitimately used for relief work, we believe that it can be best used for educational purposes and for organizing the relief agencies already existing.

The State Association now has an experienced and qualified representative in Butte who is working with Dr. Lanza of the Public Health Service and the local Anti-Tuberculosis Association with a view of getting the labor organizations, fraternal societies and the different mining companies interested in a practical way in preventive work.

The Butte local organization already has one visiting nurse in the field. At least two more nurses are required. A Tuberculosis Clinic is being organized under the direction of Dr. Lanza who has been detailed by the United States Public Health Service to make an investigation of the The city and county sanitary conditions in the mines. authorities are co-operating with the Association and are aiding very materially in the work. The County Commissioners have turned over for the use of the Local Society an excellent office and examining room and have agreed to light and provide the same with hot and cold water. These rooms have been furnished by voluntary contributions from business houses, a contribution from the Mayor, and also from the State Organization. The State Organization is very much encouraged by the progress of the work in Butte.

This work was made possible on account of the sale of Red Cross Seals last year. We anticipate a very large sale of these Seals this year, and it is the intention of the Association to extend its work throughout the State.

During the year 1915 there were four hundred and forty-four deaths from tuberculosis in Montana. Estimating ten cases to every death, which is a conservative estimate,

this would make the number of cases of this disease four thousand four hundred and forty, and yet we find many people who say that there is no tuberculosis in Montana. With four thousand four hundred and forty foci of infection, it behooves us to put in operation all possible preventative measures.

A large sale of Red Cross Seals will put in the hands of the State Association a fund which will be used to combat the disease and prevent its spread.

PROBLEMS IN TUBERCULOSIS.

By Margaret Hughes.

Sanitorium treatment is without doubt, nearer the ideal than any system yet worked out in the care of tuberculosis patients. The advanced cases are removed from communities—segregated—the menace of infection is removed from the homes, the proper care of the patient is easier of accomplishment because pursued under conditions designed for that purpose. The incipient cases are brought under the power of educational forces; and when improved or cured, return to their homes and teach the rules of health and the prevention of disease. But a small percent of the unfortunate citizens of Montana attacked by this dreaded plague can avail themselves of this treatment because the state sanatorium has not adequate space.

Therefore it is that either voluntarily or involuntarily the great percent of tuberculosis cases receive home treatment which results in the spreading of disease in the families and the communities. Towns and cities of older states protect themselves from this danger by sending an agent into the homes to teach the proper care of the patient. Not only to teach the details of hygiene, proper food, clothing, personal cleanliness, and value of fresh air but to see that the teachings are carried into practical application. This agent is the civic or visiting nurse. She goes into the homes of the people and interprets in simple language and by demonstration the discoveries of science. The work of such women is not an experiment. It has stood the test of time and is declared by scientific men as the most powerful force in the prevention of disease and in the fight against tuberculosis. Yet we find but one such agent in Montana. Butte has one tuberculosis visiting nurse.

Public sentiment is growing stronger and stronger in a demand for adequate sanitorium care, but as vet our towns and large cities have not awakened to their responsibilities in securing proper home treatment for tuberculosis patients or in protecting the well from infection. For instance, a man. the bread winner, with a wife and five children falls a victim to the disease. Extreme poverty may follow. The Associated Charities may give material help and a church and friends some comforts and cheer, but who is to teach the man how not to spread infection and to so care for himself as to have a chance for life and recovered health? Sanatorium treatment would be his safest route to recovery, but lack of accommodation, a waiting list, or other reasons may cut of this way of escape from the doom of the disease. The man must be cared for in his ownhome. How can his condition be rendered less hopeless; how can home treatment be made more successful? The one most satisfactory agent yet found in solving this problem is the visiting nurse. She gives the most efficient service for the least money and it is time communities are awakening to their responsibility in providing this nursing service for the conservation of the health of the people. It has been said that public health is in a large measure purchasable; if this be true a civic nurse is a wise and economic municipal investment.

This leaves the rural districts out of the plan for protection and constructive work. Statictics prove that tuberculosis is little if any less prevalent per capita in the rural districts than in the cities; and this is no less true in Montana than of the country at large. Ten years ago this principal would not have applied to Montana, but today it does.

The rural districts have been settled rapidly. Many of the settlers bringing with them the infection of tuberculosis. They have built their little homes and endured the hardships of the dry land farmer; but have had but little time to devote to ventilation, hygiene or overcrowding conditions. Sometimes six or eight people have had to sleep, eat and live in a home not much over eighteen by twenty feet. When a case of tuberculosis developed in such a home, the infection following was rapid and sure. An appalling ignorance of the nature of the disease or of its care or prevention is often found existing under these conditions. An apathetic

endurance exists which should be turned to determined resistance by intelligent understanding of the use of the weapons effective in combating the disease. An educational campaign will do much to accomplish this. Organization is the machine through which education may be carried on such as churches, schools, granges, farmers and fraternal societies. Publicity on the problems of tuberculosis may be given by the press, especially the farm journals.

Much valuable information will be carried to the country districts by the sale of the Red Cross Christmas Seals, and by the observance of Tuberculosis Sunday and Children's Health Crusade Day. The money gained in the sale of these seals will lead to more efficient war on tuberculosis in the year to come.

Past endeavor has resulted in a sanatorium at Galen, that is state work; in the a clinic and the employment of a visiting nurse for Butte, that is community work; and in a strong state association for prevention of tuberculosis, which gives opportunity for individual work. These three lines of endeavor must be enlarged, must expand if any gain is to be made on the enemy. This is a serious problem and requires the best effort of every citizen of the state.

It is estimated in the United States 150,000 people die annually from this disease. Each death represents 10 active cases with a total of 1,500,000 victims suffering from some form of tuberculosis.

In 1912 Montana lost 472 from this cause. If the proportion of deaths to active cases holds good in Montana as compared with the country at large our harvest is great and the laborers few.

RED CROSS CHRISTMAS SEALS SAVE LIVES.

By Sara E. Morse.

If our government can raise millions of dollars to meet a war deficit by the sale of stamps; if our government can run its post office department by the sale of stamps; if the street-car companies and the Woolworth Stores can grow rich on nickels; surely Montana can raise a sufficient sum to stamp out Tuberculosis in the state by the sale of Red Cross Christmas Seals. Red Cross Christmas Seals were first sold in Delaware in 1907 and the sale has spread with such wonderful rapidity that today the seals are sold in every state and territory in the United States, including Hawaii, Porto Rico, and the Canal Zone; over 250,000,000 seals have been distributed and 500,000 workers will be engaged in the 1916 Red Cross Christmas Seal Campaign. The sale of last year broke all previous records totaling over 150,000,000 seals, an increase of 35 per cent over 1914. Rhode Island had the largest per capita sale—2.29 per cent while Hershey, Pa. had the largest per capita sale of the cities—29.044. Last year Montana sold 245,863 seals making our per capita about .55 per cent; this year our record will be far better for our slogan is—"Two Seals for Every Inhabitant."

While over \$3,000,000 has been raised in the nine years by the sale of the seals this sum does not begin to measure the value of the Red Cross Christmas Seal Campaign; practical instruction on the prevention and cure of Tuberculosis has been brought literally to millions of people and thus kept hundreds of thousands of people from falling prey to Tuberculosis. There is a two-fold purpose in the campaign—the funds derived from the sale of seals pays for visiting nurses, establishes dispensaries, teach people how to keep from spreading disease, provides necessities of life and relieves suffering and on the other hand it arouses and creates interest in the prevention of Tuberculosis. educational feature is one of the most vital points of the campaign; each volunteer in the campaign has the satisfaction of useful service then in two ways-if one succeeds in selling seals the funds will be judiciously expended in the support of the campaign against Tuberculosis, if one does not make a sale, one at least has done a part in arousing interest in the subject. The record of the last few years shows this to be true. In 1905 there were only 24 Anti-Tuberculosis Societies in the United States, today there are 1,400; there were only 115 hospitals, 19 dispensaries, no open-air schools, no visiting nurses while today we have 550 special tuberculosis hospitals, 455 dispensaries, 800 openair schools, 3000 visiting nurses—the funds for carrying on this work have come from the Red Cross Christmas Seal Sale and from the interest created from the Sale. display of seals, every effort made to sell seals, every

sermon preached, every health talk elicited by the Red Cross Christmas Seal Campaign has helped promote this marvelous growth in anti-tuberculosis work.

In the war abroad the Red Cross ministers to the wounded; here the Red Cross not only brings relief to the suffering and dying but also serves a defense against the enemy, "Tuberculosis." The Red Cross Christmas Seal Campaign is a winning war, not a wasting war; it is a war that pays, for it brings prosperity—it brings cure or relief to the sick and protects the well.

Here in our state we can not afford to be indifferent to this Enemy—our death rate is higher from this disease than the death rate of the country at large for all our "boasted climatic" conditions. In a certain town in our state there were over 100 persons killed last year with Tuberculosis and approximately 500 other persons in this city are maimed on account of the same disease and will die probably in the course of a few months or years—this procedure has been going on for a number of years and unless we are sufficiently aroused it will continue with a strong probability of a larger number of fatilities as the days go by. A very conservative estimate would place the value of these lives with the cost of the funerals, the cost of the sickness of those maimed, and with the loss of time incident to said sickness at \$600,000 basing this estimate on the figures of the Montana Board of Compensation which values a man's life at \$4,000. If this disease were to destroy \$600,000 worth of cattle in a town the state would be terribly aroused just as it was some years ago when the "foot and mouth" disease swept over the state. If the N. P. R. R. which runs through this town were to kill 100 people and maim 500 others in a year, it would cost this railroad many millions of dollars and in all probability the law would compel the company to run their tracks above the city. Should we not be much concerned over such conditions? Should we not feel the great need of educating the people of our state toward doing more to protect human life? Montana prides herself upon her wonderful resources and justly so, but it is well for us to ponder over the words of Charles Hughes, Republican candidate for President of 1916; "We pride ourselves upon the riches of our country in forest, field, and mine but our boys and girls are our true resources without

which all else fails; if we would avail ourselves of the bounties of nature and make good use of the priceless opportunity that is ours we must do so by taking good care of the boys and girls". This is splendid advice and I know of no better way of taking good care of our boys and girls than by conserving the health of our youth. Tuberculosis finds its greatest number of victims among the young and by teaching our boys and girls that this disease is both preventable and curable, by educating them along health lines we can do much toward lessening this disease in our state. A seal bought will help spread this information and will help toward conservating the health of our boys and girls. Will you not help "Home Folks" drive out tuberculosis in our "Home State"? Buy then Red Cross Christmas Seals Now.

THE STORY OF TUBERCULOSIS. What Everybody Should Know About Consumption Told in Simple Language.

Tuberculosis is an infectious and communicable disease caused by the growth of the tubercle bacillus within the body. This bacillus is a vegetable parasite, rod-shaped, and of such length that it would require ten thousand of them laid end to end to measure an inch. It lives a strictly parasitic life, which signifies that under ordinary circumstances it does not live indefinitely and propagate its kind outside of its living host, which may be man, almost any domestic animal, or one of the many animals that have not been brought under domestication. Though incapable of propagating itself outside of its living host, it is capable of living for a long period of time under favorable conditions outside of the body.

These conditions which most favor the prolongation of its life outside of the body are darkness, moisture, and ordinary temperatures. It dies in a few minutes when exposed to direct sunlight, when not deeply imbedded in the albuminous discharges from the lessions which are characteristic of the disease. In the human body the commonest form of tuberculosis is consumption, or tuberculosis of the

lungs, but it may occur in any part or organ of the body, especially in the bones, joints and lymph glands of children, in which structures it is known respectively as white swelling of bones and joints, and scrofula. It is very common cause of hunchback and of meningitis in children.

The tubercle bacillus in the body stimulates the growth of cells which, under the influence of toxins or poisons which are elaborated by the bacillus, die, disintegrate, and are given off from the body in the form of discharges that are peculiar to the organ or tissue in which the lesion is located, e. g., from the lungs as sputum, from scrofulous glands and white swelling as pus, and from the intestines in the feces. All these discharges are capable of starting the disease in the healthy, whether by being taken into the stomach, inhaled in the lungs, or by the inoculation of open superficial cuts and wounds.

Predisposing Causes.

Approximately ten per cent of all cases of tuberculosis occuring in children have resulted from the ingestion of milk or meat from tuberculous animals. Tuberculosis is not inherited as was formerly supposed. It is always acquired through infection from some other case by the transmission of the tubercle bacillus either directly or indirectly. Because it is a germ disease it is preventable and curable, not unavoidable and fatal as until recently it has been regarded. All people are not equally susceptible to the disease. who are in a weakened physical condition, or who lack proper and sufficient food, or who are addicted to the use of alcohol, or who have suffered from grippe, colds, measles, typhoid, pleurisy, etc., or who take insufficient rest, or exercise too little in the open air, or sleep in close rooms, or work in a moist, dark or dusty atmosphere, are predisposed to the disease.

While tuberculosis is not essentially a disease of the poor and destitute, it is with this class of people that it is most prevalent.

Commonest Early Symptoms.

The commonest early symptoms of the disease are persistent cough or cold lasting a month or longer, hoarseness, loss of weight and appetite, run-down feeling, slight fever in the afternoons, night sweats, spitting of blood or streaks

of blood in the sputum. Any one, or any combination of these symptoms, should lead one to suspect tuberculosis, and he should consult a physician immediately. If the physician can not find a cause for these symptoms, in nine cases out of ten they should be attributed to tuberculosis. It is most important that the disease be recognized early so that timely treatment may be begun. Most cases of tuberculosis that have been diagnosed in the incipient or very early stage, under modern methods of treatment, are cured.

Tuberculosis in Children.

Tuberculosis is a house disease, a disease of the home. It runs in families, not because inherited, but because of home association. It is probable that most infections occur in childhood, though the disease may not develop to the point of recognition until late in life. It is acquired by children through kissing, caressing, use of common eating utensils, and from playing on an infected floor. A consumptive in the family may be the means of transmitting the disease not only through spitting, but by coughing, sneezing, and even by speaking into the face of another.

How Tuberculosis May Be Prevented.

The sputum which a consumptive raises should be received in a cuspidor containing an antiseptic solution, or he should cough or spit into a napkin or on to a paper held before his face, and these should then be thoroughly disinfected or burned. The prevention and treatment of tuberculosis rests upon the principles that have been set forth above. They are:

- 1. Early and frequent examination in suspected cases and of all individuals of a family in which tuberculosis is known to exist or to have existed.
- 2. The control and destruction of all tuberculous discharges.
- 3. Living and sleeping in the open air as much as possible.
- 4. No tuberculosis patient should sleep in the bed or even in the room with an unafflicted person.
 - 5. Proper food in sufficient quantity.
 - 6. Plenty of sleep.
- 7. Absolute rest in bed when the temperature is over 99 degrees, or the pulse is over 100.

These conditions are best obtained in the early stages of tuberculosis in a sanitorium; in the advanced stages in a hospital. All treatment of tuberculosis should be under the direction of a physician, whether at home or in an institution. All patent medicines and alcohol must be avoided.

An important adjunct to the treatment at home of incipient tuberculosis in children is the open-air school; in adults, the day camp or the night camp.

What is Being Done to Prevent Tuberculosis.

In its broader aspects the campaign against tuberculosis includes popular and systematic school education and social or visiting nursing. Under popular education are included free lectures, exhibits, whether local or traveling, moving picture plays, lantern demonstrations, special popular educational literature in the form of circulars or magazine articles, and newspaper publicity and visiting nursing. Under systematic school education may be included lectures, natural science lessons, recitations, the organization of Red Cross Seal selling campaigns, and the employment of school nurses and the medical inspection of school children. This systematic educational work should be graded in adaptation to the age and maturity of the pupil, and should be illustrated and demonstrated in the various ways employed in the teaching of natural science, so far as possible.

The general movement against tuberculosis includes also the securing of proper state and municipal legislation, as well as co-operation with all movements for the betterment of living and working conditions.

How You Can Help.

- 1. Teachers—By instructing pupils as to the nature, prevention and care of tuberculosis; teaching children simple rules of health, how to breathe deeply, etc.; keeping the classroom well ventilated, and by insisting upon the medical inspection of school children.
- 2. Parents—By keeping the home clean and well ventilated; teaching children to sleep with windows open, to eat proper and nourishing food, to observe the laws of health, to keep the teeth clean and in repair.
- 3. Children—By keeping clean; by not putting anything into your mouths except food; by staying as much as possible in the fresh air and sunshine; by eating only

wholesome and nourishing food; by always washing the hands before eating.

4. Everyone—By taking care of your own health; by stopping indiscriminate spitting; by joining in the movement to stamp out tuberculosis by buying and otherwise promoting the use of the Red Cross Christmas Seal; by insisting upon the employment of county-paid tuberculosis visiting nurses; by promoting the organization of a county or district tuberculosis hospital in your community.

Here Are Some of the Things That Must Be Done.

- 1. Every city and village must have an ordinance, and enforce it, forbidding spitting in public places or in public vehicles.
- 2. When a case of tuberculosis is found in a family, other members must be examined to learn if they be infected.
- 3. Every city and county must have a well organized health department and a tuberculosis visiting nurse.
- 4. All living cases of tuberculosis must be reported to the State Board of Health.
- 5. Every living case of tuberculosis must be sent to a hospital, to the State sanitorium, or must be under proper care at home.
- 6. Every county must have a tuberculosis hospital for advanced cases.

TUBERCULOSIS WEEK.

Tuberculosis Week—December 3-10, is an annual educational movement for the Study and the Prevention of Tuberculosis; is an extensive campaign to secure within a week's time a simultaneous presentation of the subject of tuberculosis before the greatest possible number of people. Three special days are provided: Medical Examination Day, December 6th, Children's Health Crusade Day, Friday, December 8th, Tuberculosis Sunday, December 10th. Medical Examination Day will be the second annual effort on a national scale to induce every one, sick or well, to have a physical examination, the intention being to popularize a movement which thousands of persons have already found to be one of the best ways of preventing illness. Children's Health Crusade Day will be devoted to interesting children

in health plays, in compositions on tuberculosis, and in the sale of the Red Cross Christmas Seals. The culmination of the week will be the celebration of Tuberculosis Sunday, emphasizing the part of the churches in public health work. The movement has secured the endorsement of almost all creeds and denominations and over 150,000 churches participated in the observance last year while many donated their collections. The aim of the week is educational emphasis being laid on the great good coming from an increased knowledge of the nature of the disease and the methods of prevention; the week will also inaugurate the Campaign for the Red Cross Christmas Seals, the source of support for the Anti-Tuberculosis work in Montana. With the proceeds of the sale children and grown-ups are taught how to escape and conquer Tuberculosis, nurses are sent among the poor. dispensaries and hospitals secured.

Indifference is a crime no matter where it occurs and no man can afford to be indifferent to anything that effects himself and his fellow-men. Tuberculosis effects you and your community relationships; can you afford to be indifferent to Tuberculosis Week? The Montana Association for the Prevention of Tuberculosis has issued an appeal to every school, club, and church to participate in the celebration of the week and the Society confidently expects each organization will do its part in making a success of the campaign in Montana.

DO YOU KNOW

Tuberculosis kills 200,000 persons every year in the U.S.

Tuberculosis kills one every three minutes.

Tuberculosis kills one-tenth to one-seventh of all our people.

Tuberculosis kills one-third of all who die between the ages of 18 and 45.

Tuberculosis costs in dollars and cents over \$500,000,000 a year in loss of life and labor.

Tuberculosis has 1,500,000 victims today in the U.S.

Tuberculosis costs the U. S. two-thirds as much as the wages paid by all factories in the land.

Tuberculosis has five infections from every one case.

Tuberculosis claims one death in Montana out of every nine.

Ninety per cent of us who seemingly are healthy carry tuberculosis scars about with us.

That every volunteer selling Red Cross Christmas Seals helps in two ways—first, the money secured from the seals helps support the campaign against tuberculosis and second, offering seals for sale arouses interest in tuberculosis and helps educate everyone in the prevention of tuberculosis.

That every seal bought is a bullet in the fight; every seal sold helps protect your state, your town, your neighbor, and yourself.

That it is estimated that the sale of the Red Cross Christmas Seals has already saved our country over 53,600 lives.



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